

REMARKS

The application has been carefully reviewed in light of the Office Action dated October 16, 2003. Claims 13 to 24 are in the application, with Claim 13 being the sole independent claim. Reconsideration and further examination are respectfully requested.

The specification has been amended to attend to formal matters.

Claims 1 to 12, which were withdrawn from consideration pursuant to a restriction requirement, have been cancelled without prejudice to Applicants' right to present these claims in a later-filed division.

Claim 21 was rejected under 35 U.S.C. § 112, second paragraph. Applicants have carefully reviewed and amended Claim 21 to attend to the issue raised in the Office Action. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

Claims 13 to 19, 22 and 23 were rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 6,048,394 (Harmer) in view of the article "Hexagonal-phase retention in pressureless-sintered barium titanate" (Lin); and Claims 20 and 24 were rejected under 35 U.S.C. § 103(a) over Harmer and Lin in view of U.S. Patent No. 4,661,462 (Sakabe). In response, Claims 13 to 19 and 21 to 23 have been amended. Reconsideration and withdrawal of the rejections are respectfully requested.

The present invention concerns a method for manufacturing BaTiO_3 - PbTiO_3 series single crystal. The method includes the steps of (i) providing a BaTiO_3 - PbTiO_3 compact powder or sintered substance having a smaller Pb content mole number than Ba content mole number by defining the range of the molar ratio of elements contained therein to be $0.9800 < (\text{Ba} + \text{Pb}) / \text{Ti} < 1.0000$; and (ii) heating the compact powder or sintered substance, while keeping said compact powder or sintered substance in non-molten condition.

Thus, according to one feature of the invention, the BaTiO_3 - PbTiO_3 compact powder or sintered substance has a smaller Pb content mole number than Ba content mole number.

Neither Harmer nor Lin is seen to teach or suggest this feature.

Moreover, Applicants submit that there is no motivation or suggestion to combine the teachings of Harmer and Lin, since Lin is only concerned with the formation of multi-crystals.

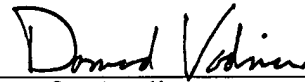
Sakabe is not seen to remedy the foregoing deficiencies of Harmer and Lin.

Applicants therefore conclude that the applied documents do not teach or suggest the claimed invention either singly or in the combination proposed by the Office Action, and it is respectfully requested that the Section 103 rejections be withdrawn.

No other matters being raised, the entire application is believed to be in condition for allowance and such action is courteously solicited.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our address given below.

Respectfully submitted,



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